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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE APPLICATION NO. 07/15/2003 Yasutaka Ito 238750US-90CONT 10/618,623 03/04/2004 **EXAMINER** 22850 7590 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. PAIK, SANG YEOP 1940 DUKE STREET

PAPER NUMBER ART UNIT

3742

DATE MAILED: 03/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)	$\mathcal{O}()$
	10/618,623	ITO ET AL.	CI D
Office Action Summary	Examiner	Art Unit	
	Sang Y Paik	3742	
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the	e correspondence ad	ldress
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply will, by star Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply be eply within the statutory minimum of thirty (30) o od will apply and will expire SIX (6) MONTHS fro tute. cause the application to become ABANDO	timely filed days will be considered time om the mailing date of this o	ly. ommunication.
Status			
1) Responsive to communication(s) filed on	·		
 , — , — , —	his action is non-final.		
3) Since this application is in condition for allow			e merits is
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
4) Claim(s) 12-16 is/are pending in the applica	tion.		
4a) Of the above claim(s) is/are withdrawn from consideration.			
5) Claim(s) is/are allowed.			
6) Claim(s) <u>12-16</u> is/are rejected.			
7) Claim(s) is/are objected to.	d/or alaction requirement		
8) Claim(s) are subject to restriction and	a/or election requirement.		
Application Papers			
9) The specification is objected to by the Exam	iner.		
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.			
Applicant may not request that any objection to t			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
11) I he oath or declaration is objected to by the	Examiner, Note the attached On	ice Action of Ionn F	10-132.
Priority under 35 U.S.C. § 119			
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).			
a)⊠ All b)□ Some * c)□ None of:			
1. Certified copies of the priority documents have been received.			
 2. Certified copies of the priority documents have been received in Application No. <u>09/926,092</u>. 3. Copies of the certified copies of the priority documents have been received in this National Stage 			
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).			
* See the attached detailed Office action for a	•	ived.	
Attachment(s) 1) X Notice of References Cited (PTO-892)	4) Interview Summ	ary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mai	l Date	(O. 452)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date 16/17/63, 16/3/03	08) 5) ☐ Notice of Informa 6) ☐ Other:	al Patent Application (PT	U-192)
Paper No(s)/IVIall Date 15/17/63, 16/3/03 S. Patent and Trademark Office	, —		

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ushikoshi et al (US 5,306,895) in view of Arena et al (US 5,635,093) or Nobori et al (US 5,616,024).

Ushikoshi et al shows a ceramic heater having a nitride ceramic plate with a heating element formed inside the ceramic plate, a bottomed hole made directly opposite to the heating surface, the bottom of the bottom hole formed relatively nearer to the heating surface than the heating element, a temperature-measuring element set up in the said bottom hole, the distance between the bottom of the bottomed hole and the heating surface is less than the thickness of the ceramic plate as shown in Figure 32. However, Ushikoshi et al does not show the heating element into at least two circuits.

Arena et al shows the heating element having a plurality of heating conducting circuits.

Nobori et al also shows a plurality of heating circuits that can be independently controlled. In view of Arena et al or Nobori et al, it would have been obvious to one of ordinary skill in the art to adapt Ushikoshi et al with the a plurality of heating circuits so that each heating elements can be independently controlled and better enable a more uniform heating across the heating surface.

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3. Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ushikoshi et al in view of Arena et al or Nobori et al as applied to claims 12 and 14 above, and further in view of Kersten et al (US 5,919,385) or Hecht et al (US 5,877,475).

Ushikoshi et al in view of Arena et al or Nobori et al shows the structure claimed except the temperature sensor pressed on the bottom portion of the hole.

Kersten et al shows a temperature sensor being pressed by a spring elastic means to press the heating temperature sensor against the heating surface. Hecht et al also shows a temperature sensor being pressed against the heating surface by an elastic body such as a spring member. Hecht et al further shows the temperature sensor is a thermocouple in a sheath. In view of Kersten et al or Hecht et al, it would have been obvious to one of ordinary skill in the art to adapt Ushikoshi et al, as modified by Arena et al or Nobori et al, with the means to press the heating temperature sensor against the heating surface so that the temperature sensor can make a close contact with the heating surface to more accurately measure the operating temperature.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ushikoshi et al in view of Arena et al or Nobori et al as applied to claims 12 and 14 above, and further in view of Yoshida et al (US 6,080,970).

Ushikoshi et al in view of Arena et al or Nobori et al shows the structure claimed except the heating element having a flat shape.

Yoshida et al shows a heating element having a flat shape. In view of Yoshida et al, it would have been obvious to one of ordinary skill in the art to adapt Ushikoshi et al, as modified by Arena et al or Nobori et al, with a heating element having a flat shape to further improve the heating distribution by the heating element.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Y Paik whose telephone number is 703-308-1147. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S. Pz.

Sang Y Paik Primary Examiner Art Unit 3742